

AMENDMENTS TO THE CLAIMS:

Please add new claims 38 and 39.

Please amend claims 24, 26, 27, 29 and 37 as follows:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-23 (Cancelled)

24. (Currently amended) A method of diagnosing colon cancer comprising:

a) determining the level of a nucleic acid ~~nucleotide sequence~~ comprising a sequence at least 98% identical to SEQ ID NO:167, or a full complement thereof, in a patient sample comprising colon tissue; and

b) comparing the level of the nucleic acid ~~nucleotide sequence~~ in (a) to a level of the nucleic acid ~~nucleotide sequence~~ in a second sample, said second sample comprising non-cancerous colon tissue;

wherein a decrease of at least 50% in a level of expression of the nucleic acid between the patient sample and the second sample ~~a patient sample with a level of expression the nucleotide sequence at least 50% less than the level of expression of the nucleotide sequence in the second sample~~ indicates that the patient has colon cancer, and wherein the nucleotide sequence at least 98% identical to SEQ ID NO:167 encodes a polypeptide which binds to the promoter of the inosine-5'-monophosphate dehydrogenase type II gene.

Claim 25. (Cancelled)

26. (Currently amended) The method of claim 24 wherein the nucleic acid ~~nucleotide sequence~~ comprises SEQ ID NO:167.

27. **(Currently amended)** A method of diagnosing colon cancer comprising:

(a) determining the level of a nucleic acid ~~nucleotide sequence~~ comprising SEQ ID NO:167, or a full complement thereof, in a patient sample comprising colon tissue; and

(b) comparing the level of the nucleic acid ~~nucleotide sequence~~ in (a) to a level of the nucleic acid ~~nucleotide sequence~~ in a second sample, said second sample comprising non-cancerous colon tissue;

wherein a decrease in a level of expression of the nucleic acid of at least 50% between the patient sample and the second sample ~~a patient sample with a level of expression of the nucleotide sequence at least 50% less than the level of expression of the nucleotide sequence in the second sample~~ indicates that the patient has colon cancer.

Claim 28 **(Cancelled)**

29. **(Currently amended)** The method of claim 24 or claim 27 wherein the decrease difference between the level of the nucleic acid ~~nucleotide sequence~~ in (a) and the level of the nucleic acid ~~nucleotide sequence~~ in the second sample is at least 100%.

Claims 30-31 **(Cancelled)**

Claims 32-36 **(Cancelled)**

37. **(Currently amended)** The method of claim 24 wherein the nucleotide sequence at least 98% identical to SEQ ID NO:167 encodes a polypeptide having the same cell proliferation activity as EGR1 ~~a polypeptide encoded for by SEQ ID NO:167~~.

38. (New) A method of colon cancer comprising:

a) determining the level of a nucleotide sequence that hybridizes under highly stringent conditions to SEQ ID NO:167, or the complete complement thereof, in a patient colon sample; wherein hybridization is performed at 60°C in a solution with a sodium ion concentration from about 0.01 to 1.0M, pH 7.0 to 8.3 comprising formamide; and

b) comparing said level of nucleotide sequence in (a) to a level of the nucleotide sequence in a second sample, said second sample comprising a negative control comprising non-cancerous tissue;

wherein a decrease of at least 50% between the level of the nucleotide sequence in (a) and the level of the nucleotide sequence in the second sample indicates that the patient has colon cancer.

39. (New) A method of diagnosing colon cancer comprising:

(a) determining the level of a nucleic acid comprising a nucleotide sequence which encodes the polypeptide encoded by SEQ ID NO:167 in a patient sample comprising colon tissue; and

(b) comparing the level of the nucleic acid in (a) to a level of the nucleic acid in a second sample, said second sample comprising non-cancerous colon tissue;

wherein a decrease in a level of expression of the nucleic acid of at least 50% between the patient sample and the second sample indicates that the patient has colon cancer.